

REMARKS

Introduction

Claims 1-15 are pending. Claim 1 has been amended hereby. Claims 12-15 are new. Claims 1, 14, and 15 are independent. Entry of this Amendment, and reconsideration of the above-identified application in view of the following remarks, is respectfully requested.

Rejections under 35 U.S.C. § 103(a)

Claims 1-11 stand rejected under 35 U.S.C. 103(a) as unpatentable over U.S. Patent Application Publication No. 20030140332 (Norton) in view of U.S. Patent Application Publication No. 20040073870 (Fuh).

Amended claim 1 of the present application recites, *inter alia*, a "method for use in a distributed processing system to specify an application service." The method includes "defining a schema comprising an operation having a plurality of arguments, the schema having a nested operation," "validating the schema," and "executing said operation **on a first processor** in said distributed processing system; and executing said nested operation **on a second processor** in said distributed processing system."

Thus, by amended claim 1, a method is provided to specify new functionality that can relate to distributed data processing systems. The present invention defines a schema which encodes an existing program that resides on one computer, which is composed of operation or function or method calls, which has as described in the specification of the present application as filed at page 2, lines. 3-5, "a signature, i.e., a number or a number and data type of various parameters that must be passed to the function, and a return type (*i.e.*, the meaning that is typically employed when dealing with traditional programming languages, such as C, C++ or Java)". The parameters may themselves be function calls or operations, which create a nested

function. Several of these function calls are grouped together into a program. The function call containing the nested function call or calls is executed on one processor and the nested function calls are executed on a second processor in the distributed processing system, i.e., the operations of the function calls can be distributed among several processors to be executed simultaneously. The processors can be co-resident on the same computer or distributed within a network such as the Internet. On each processor, the function signature must be checked for validity, i.e., whether the signature matches what it determines from its stored function of the same name is a valid signature.

Norton describes a system for generating a specialized software development tool, and uses a definition file that defines actions to be performed by the tool, a schema that defines inputs for the tool, and a resource file, that includes information required by the tool at runtime, to generate the software development tool. The tool is used to automatically generate a program. (See Norton at abstract and FIG. 1.). The system of Norton is a program for generating a program. At page 2, paragraph [0021], Norton states that "the present invention may be implemented on virtually any type of computer," but shows this computer in FIG. 1 as "a typical computer (10) includes a processor (12)." This implies that the program of Norton is not executed on multiple processors in a distributed processing system. Furthermore, at paragraphs [0044] and [0045], Norton describes the software development tool 34 as being run in a stand alone runtime environment or an integrated runtime environment, which implies a single processor executing the program, not "executing said operation **on a first processor** in said distributed processing system; and executing said nested operation **on a second processor** in said distributed processing system" as recited by amended claim 1. Accordingly, Norton fails to teach or suggest each and every limitation of claims 1 as amended.

Thus, Norton does not describe a program being executed on multiple processors, nor does Norton describe “executing said operation **on a first processor** in said distributed processing system; and executing said nested operation **on a second processor** in said distributed processing system” as recited by amended claim 1.

Fuh fails to correct the deficiencies of Norton. Fuh describes a system that includes loading an XML document into a runtime validation engine, where the runtime validation engine includes an XML schema validation parser, loading an annotated automaton encoding (AAE) for an XML schema definition into the XML schema validation parser; and validating the XML document against the XML schema definition by the XML schema validation parser utilizing the annotated automaton encoding. (*See* Fuh at abstract and FIG. 1.) Fuh describes that each of different XML schema definitions are compiled once into AAE (Annotated Automaton Encoding) format. The AAE parser can then be used on any AAE format definition set. *Id.*

In the Office Action, the Examiner cited paragraphs [0095] and [0096] of Fuh as teaching executing the program in a distributed environment. These paragraphs, however, merely summarize the invention mentioned above, and do not refer to the environment they are executed in, either stand alone or distributed. In fact, nowhere in Fuh is it mentioned as to where the system is executed: either on one processor or more, stand alone or distributed environment. Accordingly, Fuh fails to teach or suggest each and every limitation of claims 1, as amended, namely “executing said operation **on a first processor** in said distributed processing system; and executing said nested operation **on a second processor** in said distributed processing system” as recited by amended claim 1. As such, the Applicants respectfully request that the §103(a) rejection of claim 1 and claims dependent therefrom (i.e., Claims 2-13) be withdrawn.

Furthermore, neither Norton nor Fuh, alone or in combination, teach or suggest each and every limitation of new independent claim 14, namely “defining a schema comprising an operation having a plurality of arguments, the schema having a nested operation, said operation and **said nested operation representing calls from a client application to a service application.**” Norton describes the software development tool 34 as being run in a stand alone runtime environment or an integrated runtime environment, which implies a single thread of executing the program such that there is no concept of client and server. Nowhere in Fuh is it mentioned as to where the system is executed: either on one processor or more, stand alone or distributed environment. Again there is no concept of client and server. As such, the Applicants respectfully requests that claim 14 be allowed.

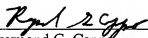
Furthermore, neither Norton nor Fuh, alone or in combination, teach or suggest each and every limitation of new independent claim 15, namely “executing said operation **at a first service application** in said distributed processing system, and executing said nested operation **at a second service application** in said distributed processing system.” In the claimed invention, the operation can be executed locally on one service application, while the nested operation can be passed to a subsequent service operation, wherein the current service application becomes the client for a secondary service application. The client constructs a message as needed and passes the operation along to the next service processor. (see the present application as published as US 2004/0230587 A1, page 1, paragraphs [0015] and [0016]). As discussed above, there is no execution of one operation as a service application on one processor and executing another operation on another service processor in either Norton or Fuh. As such, the Applicants respectfully requests that claim 15 be allowed.

Conclusion

In view of the above remarks, reconsideration and allowance of the present application is respectfully requested. If any additional fee is deemed necessary, then the Commissioner is authorized to charge such fee to Deposit Account No. 50-1358. Applicant's undersigned patent agent may be reached by telephone at (973) 597-2500. All correspondence should continue to be directed to our address listed below.

Respectfully submitted,

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